Performance Summary Table 1:
Treatment Indicators

Performance Indicator	FY Targets	Actual Performance	Reference
Diabetes Group			
Indicator 1: Track Area age-specific diabetes prevalence rates (as a surrogate marker for diabetes incidence) for the AI/AN population.	**FY 02:** maintain data-base **FY 01:** maintain data-base **FY 00:** maintain data-base **FY 99:** establish baseline	**FY 02:** **FY 01:** **FY 00:** data-base maintained** **FY 99:** baseline established	**P:** p. 49 **B:** p. IHS-27 p. IHS-129 ** provisional data pending final verification
Indicator 2: Increase the proportion of I/T/U clients with diagnosed diabetes that have improved their glycemic control.	**Ideal Glycemic Control** **FY 02:** 3-year average improved **FY 01:** 3-year average improved **FY 00:** 3-year average improved **FY 99:** 25% **Good Glycemic Control** **FY 99:** 38%	**FY 02:** **FY 01:** **FY 00:** 7/01 **FY 97-99:** 24% **FY 99:** 25% **FY 98:** 22% **FY 99:** 35% **FY 98:** 35%	**P:** p. 50 **B:** p. IHS-27 p. IHS-129 **New FY 1999 Data**
Indicator 3: Increase the proportion of I/T/U clients with diagnosed diabetes and hypertension that have achieved diabetic blood pressure control standards.	**Ideal Hypertension Control** **FY 02:** 3-year average improved **FY 01:** 3-year average improved **FY 00:** 3-year average improved **FY 99:** 41%	**FY 02:** **FY 01:** **FY 00:** 7/01 **FY 99:** 36% **FY 97-99:** 37% **FY 98:** 38%[1]	**P:** p. 52 **B:** p. IHS-27 p. IHS-129 **New FY 1999 Data** [1] baseline corrected, see page 54
Indicator 4 : Increase the proportion of I/T/U clients with diagnosed diabetes who have been assessed for dyslipidemia.	**LDL Cholesterol** **FY 02:** 3-year average improved **FY 01:** 3-year average improved **FY 00:** 3-year average improved **FY 99:** 32% **Total Cholesterol** **FY 99:** 82%	**FY 02:** **FY 01:** **FY 00:** 7/01 **FY 98-99:** 38% **FY 99:** 46% **FY 98:** 29% **FY 99:** 72% **FY 98:** 79%	**P:** p. 53 **B:** p. IHS-27 p. IHS-129 **New FY 1999 Data**

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 5: Increase the proportion of I/T/U clients with diagnosed diabetes who have been assessed for nephropathy.	**FY 02:** 3-year average improved **FY 01:** 3-year average improved **FY 00:** 3-year average improved **FY 99:** 36%	**FY 02:** **FY 01:** **FY 00:** 7/01 **FY 97-99:** 31% **FY 99:** 36% **FY 98:** 33%	**P:** p. 54 **B:** p. IHS-27 p. IHS-129 **New FY 1999 Data**
Cancer Screening Group			
Indicator 6: Increase the proportion of women who receive Pap screening.	**Pap Screening** **FY 02:** +2% over FY 01 level **FY 01:** +3% over FY 00 level* **FY 00:** +3% over FY 99 level **FY 99:** no indicator **Cervical Cancer** **FY 99:** determine incidence of cervical cancer	**FY 02:** **FY 01:** **FY 00:** 11.9% in past year 17.9% in past 3 years from electronic sample baseline **FY 99:** baseline not adequate see page 58 **FY 99:** 8-10 per 100,000 based on 40% of AI/AN	**P:** p. 55 **B:** p. IHS-27 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 128-132. ** provisional data pending final validation
Indicator 7 Increase proportion of the AI/AN female population over 40 years of age who receive screening mammography.	**FY 02:** +2% over FY 01 level **FY 01:** +2% over FY 00 level* **FY 00:** +3% over FY 99 baseline **FY 99:** establish baseline	**FY 02:** **FY 01:** **FY 00:** 14.7% over past 2 years** from electronic sample baseline **FY 99:** baseline not adequate see page 60	**P:** p. 57 **B:** p. IHS-27 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 128-132. ** provisional data pending final validation
Well Child Care Indicator			
Indicator 8: Increase the proportion of AI/AN children receiving a minimum of four Well Child Visits by 27 months of age and expand coverage.	**FY 02:** +2% over FY 01 **FY 01:** +2% over FY 00* **FY 00:** +3% over FY 99 **FY 99:** establish baseline	**FY 02:** **FY 01:** **FY 00:** 47.7**% (+9.2% over FY 99) **FY 99:** 38.5% baseline	**P:** p. 59 **B:** p. IHS-27 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 128-132. ** provisional data pending final validation

Performance Indicator	FY Targets	Actual Performance	Reference
Alcohol and Substance Abuse Group			
Indicator 9: Maintain the rates and intensity of follow-up for adolescents discharged from IHS supported Regional Treatment Centers (RTC) to assure reduced rates of alcohol and drug use.	**Abstinence** **FY 02:** +5% over FY 01 **FY 01:** +5% over FY 00 **FY 00:** no indicator **Follow-up Rates** **FY 02:** FY 01 level or higher **FY 01:** FY 00 level or higher **FY 00:** 45% (+10% over FY 99 for 3 follow-ups by 12 months post discharge) **FY 99:** establish baseline for 12 months, 6 months, and 30 days follow-up rates	**FY 02:** **FY 01:** **FY 00:** **FY 00:** baseline abstinence 05/01 **FY 02:** **FY 01:** **FY 00:** 48% % -12 mos (+17%) **FY 99:** 40.9% -12 mos baseline 55.2% -6 mos 64.5% -30 days	**P:** p. 60 **B:** p. IHS-51
Indicator 10: Expand the percentage of I/T/U prenatal clinics utilizing screening and case management protocols for pregnant substance abusing women and advocate to expand usage.	**FY 02:** + 5% over FY 01 **FY 01:** + 10% over FY 00 **FY 00:** +5% over FY 99 **FY 99:** establish baseline	**FY 02:** **FY 01:** **FY 00:** 87.6% (+11.7% over FY 99) **FY 99:** 78.4%	**P:** p. 61 **B:** p. IHS-41 **New FY 1999 Data**
Oral Health Group			
Indicator 11: Increase access to optimally fluoridated water for the AI/AN population.	**FY 02:** 10% over FY 01 for AI/AN pop. receiving fluor. water **FY 01:** 10% over FY 00 for demo Areas 5% over FY 00 for other Areas* **FY 00:** 15% over FY 99 for demo Areas **FY 99:** no indicator	**FY 02:** **FY 01:** **FY 00:** 18 systems in compliance (38% increase) **FY 99:** 13 systems in compliance for demo Areas or 2%	**P:** p. 63 **B:** p. IHS-37 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 128-132.
Indicator 12: Increase annual access to dental services for the AI/AN population.	**FY 02:** +1% over FY 01 **FY 01:** 27% **FY 00:** 23% **FY 99:** 21%	**FY 02:** **FY 01:** **FY 00:** 25.1% **FY 99:** 25.1% **FY 98:** 24.5% **FY 97:** 22%	**P:** p. 64 **B:** p. IHS-37

Performance Indicator	FY Targets	Actual Performance	Reference
Indicator 13: Increase the percentage of AI/AN children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth.	**6-8 yrs** **FY 02:** +1% over FY 01 **FY 01:** +3% over FY 00 **FY 00:** +3% over FY 99 **FY 99:** 50% (36.1% recalculated.) **14-15 yrs** **FY 02:** +1% over FY 01 **FY 01:** +3% over FY 00 **FY 00:** +3% over FY 99 **FY 99:** 58% (59% recalculated)	**FY 02:** **FY 01:** **FY 00:** 44.1% (+ 4.5%)** **FY 99:** 39.6%[1] **FY 91:** 40.1% corrected baseline **FY 02:** **FY 01:** **FY 00:** 49.1% (-15.9%)** **FY 99:** 65.0%[1] **FY 91:** 66.5% corrected baseline	**P:** p. 66 **B:** p. IHS-37 ** provisional data pending final validation [1] see page 67 for explanation of revised FY 99 rates
Indicator 14: Increase the proportion of the AI/AN population diagnosed with diabetes that obtain access to dental services annually.	**FY 02:** 2% increase over FY 01 **FY 01:** no indicator **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:** 7/01 **FY 00:** 7/01 **FY 99:** 30%	**P:** p. 67 **B:** p. IHS-37
Indicator 15: Decrease the proportion of the AI/AN children 6-8 and 14-15 years with untreated dental decay.	**6-8 yrs** **FY 02:** 2% under FY 01 baseline **FY 01:** no indicator **FY 00:** no indicator **FY 99:** no indicator **14-15 yrs** **FY 02:** 2% under FY 01 baseline **FY 01:** no indicator **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:** establish electronic baseline **FY 00:** **FY 99:** **FY 02:** **FY 01:** establish electronic baseline **FY 00:** **FY 99:**	**P:** p. 68 **B:** p. IHS-37.
Family Abuse, Violence, and Neglect Indicator			
Indicator 16: Increase the % of I/T/U medical facilities with Urgent Care or Emergency departments or services that have written policies and procedures for routinely identifying, treating and/or referring victims of family violence, abuse or neglect (i.e., child, spouse, elderly) and train staff in their use	**Staff Training** **FY 02:** 56% **FY 01:** no indicator **FY 00:** no indicator **FY 99:** no indicator **Policies and Procedures** **FY 02:** 82% **FY 01:** 80% **FY 00:** 70% **FY 99:** 60%	**Staff Training** **FY 02:** **FY 00:** 54% (baseline) **Policies and Procedures** **FY 02:** **FY 01:** **FY 00:** 72% **FY 99:** 64% **FY 98:** 47% (baseline)	**P:** p. 69 **B:** p. IHS-43

Performance Indicator	FY Targets	Actual Performance	Reference
Information Technology Development Group			
Indicator 17: Expand the automated extraction of GPRA clinical performance measures by developing test sites to assess and improve data quality.	**FY 02:** assess 5 sites for 5 performance measures **FY 01:** setup 5 sites for testing 5 performance measures **FY 00:** no indicator **FY 99:** no indicator	**FY 02:** **FY 01:**	**P:** p. 72 **B:** p. IHS-137
Indicator 18: Expand the number of I/T/U programs that have implemented the use of the Mental Health/Social Services (MH/SS) data reporting system.	**FY 02:** +5 over FY 01 level **FY 01:** +10 over FY 00 level **FY 00:** +10 over FY 99 level **FY 99:** 50%	**FY 02:** **FY 01:** **FY 00:** 51% **FY 99:** 51% **FY 98:** est. 40-45% baseline	**P:** p. 74 **B:** p. IHS-143
Indicator 19: Develop the specifications and implementation plan for an automated mutually compatible information system, which captures health status, and patient care data for Indian Urban health care programs and implement at field urban sites.	**FY 02:** +10 over FY 01 level **FY 01:** implemented in 30% of urban programs **FY 00:** test in at least one site **FY 99:** develop specs and plan	**FY 02:** **FY 01:** **FY 00:** tested in several sites **FY 99:** accomplished 8/99	**P:** p. 75 **B:** p. IHS-93
Quality of Care Group			
Indicator 20: Maintain 100% accreditation of all IHS hospitals and outpatient clinics.	**FY 02:** 100% **FY 01:** 100% **FY 00:** 100% **FY 99:** 100%	**FY 02:** **FY 01:** **FY 00:** 100% **FY 99:** 100% **FY 98:** 100% (baseline)	**P:** p. 76 **B:** p. IHS-27 p. IHF-11
Indicator 21: Improve AI/AN consumer satisfaction with the acceptability and accessibility of health care as measured by IHS consumer satisfaction survey.	**FY 02:** secure baseline **FY 01:** secure Federal clearance* **FY 00:** Federal clearance and establish baseline **FY 99:** develop instrument and protocol	**FY 02:** **FY 01:** **FY 00:** submitted but clearance not completed **FY 99:** instrument and protocol complete	**P:** p. 77 **B:** p. IHS-27 p. IHS-109 * indicates revised FY 2001 measure, see Summary of Changes Table on pages 126-130.
Total Treatment Funding:	**FY 02: $2,746,954,000*** **FY 01:** $2,117,008,000 **FY 00:** $1,931,326,000 **FY 99:** $1,811,951,000 **FY 98:** $1,711,018,000 *includes 85% of M/M and PI collections and Diabetes		**P:** page # in perform. plan **B:** page # in budget justif.

A. FY 2002 Treatment Indicators:

Diabetes Group:
The following five indicators address the ongoing monitoring and treatment of diabetes in the AI/AN population. Diabetes continues to be a growing problem in many AI/AN communities with rates increasing rapidly in several Areas, age at diagnosis occurring at younger ages, and no signs of decline in any Area. The impact of this disease in terms of individual and family suffering is immense, as are the treatment costs to the Indian health delivery systems. These treatment indicators were selected because of their proven benefits in reducing the morbidity and mortality associated with this condition.

Indicator 1: During FY 2002, continue tracking (i.e., data collection and analyses) Area age-specific diabetes prevalence rates to identify trends in the age-specific prevalence of diabetes (as a surrogate marker for diabetes incidence) for the AI/AN population.

Rationale: This indicator is an essential part of monitoring progress of ongoing efforts in the treatment and prevention of diabetes. Though incidence rates of diabetes (occurrence of new cases within a certain time period) are very difficult and expensive to collect, and are only done reliably in large, population-based studies, trends in age-specific prevalence rates of diabetes can provide evidence of an increase or decrease in diabetes for a certain age group and may suggest a change in true incidence. Analysis of these trends will allow the program and I/T/U's to target prevention efforts to specific age groups and locations in ongoing and future interventions.

Approach: The IHS Office of Public Health is responsible for overall coordination of efforts to achieve this indicator. The IHS Diabetes Program estimates diabetes prevalence of diagnosed diabetes in Native Americans seeking care in I/T/U facilities. Rates are calculated using the IHS automated record system (i.e., PCC/RPMS data), and are reported by geographic Area, gender, and age groups for adults. Three-year rates will be calculated to reduce variability. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used in trend analysis. Longitudinal studies of diabetes conducted in Pima Indians since 1965 have provided extensive information on the prevalence and incidence of diabetes in this tribal community. While there are several other tribal-specific diabetes epidemiological studies, none are to the depth of the Pima studies and they cover fewer than 10% of all tribes. Furthermore, there are no published studies on the growing problem of type II diabetes in American Indian youth, though there is extensive recognition by I/T/U providers that the age of diabetes onset is declining to younger adults and children.

Local/tribal facilities can assess diabetes prevalence by using PCC registries and /or diabetes case registries, deriving baseline measures for their tribal communities. The IHS Diabetes Program and the IHS Chronic Disease Epidemiology Program can assist I/T/U facilities to enhance their PCC registries and/or other diabetes registries, as well as establish and organize systematic screening and data entry in order to better ascertain diabetes prevalence. Emphasis will be placed upon the specific age groups identified for this measure.

Diabetes prevalence information will be collected, transformed into similar formats, and transferred to the CDC Division of Diabetes epidemiologist (interagency agreement between CDC and IHS) for analysis and adjusting. Reports will be created and disseminated to I/T/U's, other DHHS agencies, universities, and private foundations for use in identifying prevention strategies and resources.

Data Source: RPMS/PCC reports, Diabetes Registries

Baseline: This indicator commits to establishing and maintaining diabetes prevalence baselines using the IHS PCC and local diabetes registries that are used now in all areas. These rates will serve as the baseline for tribal-specific prevalence studies in selected tribes and will be determined annually.

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population.* It is supported by IHS/CDC agreements, and supports several HP 2010 objectives in Focus Area 5: Diabetes.

Program Performance: The FY 2000 performance measure was to maintain the Area age-specific prevalence rates for diabetes and has been accomplished. Area age-specific diabetes prevalence rates have been prepared for the AI/AN population based on patients diagnosed with and treated for diabetes and having at least one outpatient visit during FY 1998. Rates are available by IHS Area and sex for 4 age groups (0-19, 20-44, 45-64, and 65+). The chart below summarizes the prevalence of diabetes in the AI/AN population.

Prevalence (%)* of American Indians/Alaska Natives with Diagnosed Diabetes, by Age Group and IHS Service Area, 1998

Area	Age group				ALL
	<20	20-44	45-64	≥65	
Alaska	**0.1**	**1.0**	**7.2**	**14.7**	**2.1**
California	**0.2**	**2.2**	**12.6**	**18.6**	**3.9**
Portland	**0.2**	**2.5**	**16.1**	**19.8**	**4.1**
Oklahoma	**0.2**	**3.7**	**17.9**	**19.3**	**5.7**
Navajo	**0.1**	**3.4**	**23.4**	**30.3**	**5.7**
Albuquerque	**0.1**	**4.9**	**28.8**	**31.7**	**7.3**
Aberdeen	**0.2**	**6.0**	**31.4**	**31.5**	**7.3**
Billings	**0.3**	**4.9**	**30.9**	**37.8**	**7.3**
Bemidji	**0.4**	**5.3**	**30.1**	**36.5**	**7.9**
Phoenix	**0.4**	**7.0**	**29.8**	**34.9**	**8.4**
Tucson	**0.5**	**8.0**	**34.3**	**31.3**	**9.4**
Nashville	**0.4**	**13.0**	**44.9**	**36.8**	**13.4**
ALL	**0.2**	**4.1**	**21.8**	**25.2**	**6.0**

Indicator 2 : During FY 2002, continue the trend of improved glycemic control in the proportion of I/T/U clients with diagnosed diabetes.

Rationale: This indicator is directed at reducing diabetic complications. Large clinical studies have demonstrated that glycemic control significantly reduces the incidence of complications related to diabetes. In addition, achieving better blood sugar control has been shown to

significantly reduce the costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for diabetes clinical management has significantly improved glucose control in several Indian communities.

Approach: The IHS Diabetes Program conducts an annual medical record review of a random sample of nearly 12,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the IHS Diabetes Care and Outcomes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

Glycemic control refers to how well the blood sugars are controlled in a person with diabetes. It is measured with a blood test called the Hemoglobin A1c that measures the average blood sugar for a 2-3 month period. The IHS Diabetes Care and Outcomes Audit process divides these levels of control into "Ideal" (<7%); "Good" (7.0-7.9%); "Fair" (8.0-9.9%); "Poor" (10-11.9%); "Very Poor" (>12%) categories based on national diabetes care standards. These categories will be used in the GPRA process to determine improvements in glycemic control.

The benefits of aggressive interventions to lower blood sugar in diabetics have been well described in the literature and numerous practice guidelines and standards exist. The use of appropriated diabetes funding enhancements will improve the performance of this indicator through the use of grants / cooperative agreements for special projects aimed at targeted diabetes-related treatment and prevention areas. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged through orientation, training, and monitoring provided by Area Diabetic Coordinators. Efforts to achieve this measure also include the negotiation of wholesale/at cost purchase of newer, more effective (but considerably more expensive) medications for AI/AN diabetic patients.

Data Source: Diabetes registries, yearly IHS Diabetes Care and Outcomes Audit

Baseline: The 1997-99 three-year running average of the proportion of all I/T/U clients with diabetes in the desired categories of glycemic control is 24% for "Ideal" control.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It is supported by IHS/CDC agreements and addresses Year 2010 objective 5-6 (Diabetes: diabetes-related deaths).

Program Performance: FY 2000 data for this indicator will be available 7/01 when analyses of the IHS Diabetes Care and Outcomes Audit are completed. The FY 1999 Indicator was to increase the proportion of I/T/U clients with diagnosed diabetes who have improved their

glycemic control by 3% over the FY 1998 level. The baseline criteria for this indicator was originally set on the "Good" control category, which was unchanged at 35% for FY 1998 and FY 1999 at the define "Good" level. However, the IHS Diabetes Care and Outcomes Audit recently updated its criteria for glycemic control based on the American Diabetes Association guidelines that recommend the use of Hemoglobin A1c (HbA1c) cutoffs to determine control at the "Ideal" level. Based on this new criterion, the IHS is adopting it as the basis for assessing this indicator In FY 1998 the proportion of our patients with diagnosed diabetes who were classified as "Ideal" was 22% while in FY 1999 that proportion increased to 25% and we have thus met the 3% increase target for this indicator.

Indicator 3: During FY 2002, continue the trend of improved blood pressure control in the proportion of I/T/U clients with diagnosed diabetes who have achieved blood pressure control standards.

Rationale: This indicator is directed at reducing diabetic complications. Large clinical studies have demonstrated that blood pressure control significantly reduces the incidence of complications related to diabetes. In addition, achieving better blood pressure control has been shown to significantly reduce the costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for diabetes clinical management has significantly improved blood pressure control in several Indian communities.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of over 12,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the IHS Diabetes Care and Outcomes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

Blood pressure control is usually defined in the non-diabetic person as a blood pressure level less than 140/90 mm Hg. However, because a person with diabetes is at greater risk for complications related to blood pressure, national standards recommend that the ideal goal of diabetic blood pressure control should be 130/85 mm Hg. For the GPRA process, "controlled" level will be defined as 140/90 mm Hg and "ideal" control will be defined as 130/85 mm Hg. and both levels will be reported.

The benefits of aggressive interventions to lower blood pressure in diabetics have been well described in the literature and numerous practice guidelines and standards exist. The use of appropriated diabetes funding enhancements will improve the performance of this indicator through the use of grants / cooperative agreements for special projects aimed at targeted diabetes-related treatment and prevention areas. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged through orientation, training, and monitoring provided by Area Diabetic Coordinators. Efforts to achieve this measure also include the negotiation of wholesale/at cost purchase of newer, more effective (but considerably more expensive) medications for AI/AN diabetic patients.

Data Source: Diabetes registries, yearly IHS Diabetes Care and Outcomes Audit

Baseline: The 1997-99 three-year running average of the proportion of all I/T/U clients in the ideal contol (<130/85 mm Hg) category was 37%.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It is supported by IHS/CDC agreements and addresses Year 2010 objectives 5-6 (Diabetes: diabetes-related deaths) and 5-7 (Diabetes: cardiovascular deaths).

Program Performance: FY 2000 data for this indicator will be available 7/01 when analyses of the IHS Diabetes Care and Outcomes Audit are completed. The FY 1999 Indicator was to increase the proportion of I/T/U clients with diagnosed diabetes who have achieved diabetic blood pressure control by 3% over the FY 1998 level. Since last year we have adopted the "idea" control standard as our benchmark for all future comparisons. This indicator was not met for FY 1999. In the "ideal" control category, the rate actually decreased from 38% in FY 1998 to 35% in FY 1999. In last year 's submission the baselines presented were not correct. That error has been corrected this year, and is based solely on the ideal control category. The IHS National Diabetes Program is encouraging programs to use the new diabetes funding to enhance their clinical care programs, including better blood pressure screening and more aggressive treatment as well as increased funds to the pharmacy budget to purchase newer, more effective antihypertensive agents.

Indicator 4 : During FY 2002, continue the trend of increasing the proportion of I/T/U clients with diagnosed diabetes assessed for dyslipidemia (i. e., LDL cholesterol).

Rationale: This indicator is directed at reducing diabetic complications. Large clinical studies have demonstrated that lowering of serum cholesterol significantly reduces the cardiovascular (CVD) morbidity and mortality associated with diabetes. In addition, achieving better control of lipid parameters has been shown to significantly reduce the CVD costs associated with caring for people with diabetes. Using Staged Diabetes Management treatment guidelines for lipid management has significantly improved lipid control in patients with diabetes.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of over 12,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the IHS Diabetes Care and Outcomes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. Trends over time for I/T/U facilities, service units, Areas and IHS-wide are also constructed for selected indicators. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis. However, because this measure was not included in the audit until 1998, for the FY 2000 performance report the baseline will be the 1998-99 two-year

running average. Beginning with the FY 2001 performance report the baseline for comparison will be the previous three-year running average

The benefits of aggressive interventions to lower cholesterol levels in diabetics have been well described in the literature and numerous practice guidelines and standards exist. The use of appropriated diabetes funding enhancements will improve the performance of this indicator through the use of grants / cooperative agreements for special activities aimed at targeted diabetes-related treatment and prevention areas. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged through orientation, training, and monitoring provided by Area Diabetic Coordinators.

Data Source: Diabetes registries, yearly IHS Diabetes Care and Outcomes Audit

Baseline: The 1998-99 two-year running average of the proportion of all I/T/U clients with diabetes who have had a LDL cholesterol assessment done is 38%.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It is supported by IHS/CDC agreements and addresses Year 2010 objectives 5-6 (Diabetes: diabetes-related deaths) and 5-7 (Diabetes: cardiovascular deaths).

Program Performance: FY 2000 data for this indicator will be available 7/01 when analyses of the IHS Diabetes Care and Outcomes Audit are completed. The FY 1999 Indicator was to increase the proportion of I/T/U clients with diagnosed diabetes assessed for dyslipidemia by 3% over the FY 1998 level. Screening for total cholesterol and triglycerides actually decreased overall from 79% in 1998 to 72% in 1999. However, as new research from cardiovascular disease studies in AI/AN became available through the Strong Heart Study, we have learned it is more cost effective to place our emphasis on the "important" cholesterol (LDL cholesterol). So our emphasis to providers over the past year has been to increase LDL cholesterol screening, and we are pleased to report that screening increased from 29% in 1998 to 46% in 1999. The criterion for screening for dyslipidemia has been changed to the assessment of only LDL cholesterol in AI/AN diabetics.

Indicator 5: During FY 2002, continue the trend of increasing the proportion of I/T/U clients with diagnosed diabetes assessed for nephropathy.

Rationale: This indicator is directed at reducing diabetic complications. End stage renal disease (ESRD), or diabetic kidney disease, is a significant and growing problem in Indian communities. Large clinical studies have demonstrated that certain measurements can identify those patients at high risk for ESRD and that interventions aimed at reducing risk (blood pressure control, and other "state of the science" medications) may delay the onset of ESRD. Using the Kidney Health Profile of the diabetes audit and the Staged Diabetes Management treatment guidelines for diabetes clinical management may significantly improve the approach to kidney health in Indian communities.

Approach: The IHS Diabetes Program conducts a yearly medical record review of a random sample of nearly 10,000 charts in I/T/U facilities in order to assess compliance with the IHS Standards of Care for Diabetes. These standards are a set of clinical parameters of care and patient management that have a recognized evidence-based correlation with improved diabetic patient outcomes. This record review is known as the IHS Diabetes Care and Outcomes Audit and uses a strict protocol to assure statistical integrity and comparability of both process and outcome measures over time. Each year, facility-specific values are reported for each indicator, as well as values for each Area and IHS-wide. A special sub-report of the audit, called the Kidney Health Profile, is generated which assesses screening and treatment for kidney health in a community. Three-year running rates (i.e., add the most recent year of data and drop the oldest year of data) will be used to reduce variability and provide trend analysis.

The benefits of aggressive interventions to lower blood pressure in diabetics relative to kidney health have been well described in the literature and numerous practice guidelines and standards exist. The use of appropriated diabetes funding enhancements will improve the performance of this indicator through the use of grants / cooperative agreements for special activities aimed at targeted diabetes-related treatment and prevention areas. Local efforts to improve these parameters through lifestyle intervention and appropriate medication use will be encouraged through orientation, training, and monitoring provided by Area Diabetic Coordinators.

Data Source: Diabetes registries, yearly IHS Diabetes Care and Outcomes Audit

Baseline: The 1997-99 three-year running average of the proportion of all I/T/U clients with diabetes screened for "kidney health" (based on microalbuminuria) is 31%.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It is supported by IHS/CDC agreements and addresses Year 2010 objective 5-11 (Diabetes: proteinuria).

Program Performance: FY 2000 data for this indicator will be available 7/01 when analyses of the IHS Diabetes Care and Outcomes Audit are completed. The FY 1999 Indicator was to increase the proportion of I/T/U clients with diagnosed diabetes assessed for nephropathy by 3% over the FY 1998 level and was achieved. Screening for microalbuminuria to assess early diabetic nephropathy increased from 33% in 1998 to 36% in 1999.

Cancer Screening Group:

These two indicators are directed at increasing the coverage of women receiving screening for breast and cervical cancer and thus increase cancer survival rates and reduce cancer mortality.

Indicator 6: During FY 2002, increase the proportion of women 18 and older that has had a Pap screen in the previous year by 2% over the FY 2001 level.

Rationale: The purpose of this indicator is to reduce cervical cancer morbidity and mortality by early detection. This indicator is selected because cervical cancer occurs at higher rates among AI/AN women than in the general U. S. population. The death rate for AI/AN women is 4.1 per

100,000 compared with 2.5 per 100,000 for the U.S. All Races rate. Furthermore, this cancer is the cause of significant premature mortality, and is almost entirely preventable by thorough Pap screening and early treatment of pre-cancerous conditions. The long-range goal is to reduce both cervical cancer incidence and death rates to achieve parity with the U. S. all-races rate. This may be attainable within 10 years. This indicator supports a nationally recognized standard of care.

Approach: The IHS Office of Public Health is responsible for overall coordination of efforts to achieve these indicators. Public education, training providers to perform colposcopy and treatment, and aggressive follow-up of abnormal Paps will all be part of the strategy. IHS clinical coordinators will work closely with CDC-funded Breast and Cervical Cancer screening programs in States and Tribal Health Departments to ensure that papscreening services are available to all AI/AN women.

Data Source: We had proposed to establish a baseline Pap coverage rate by April, 2000 using information from the electronic medical records (National Patient Information Resource System, NPIRS) from the IHS data center. We did not succeed in establishing this baseline because of technical problems with transferring to a new computer platform and diversion of key personnel to Y2K efforts. However, at the end of 2000 we were able for the first time to determine the pap coverage rate for all women by using these electronic records. A random sample of 5000 AI/AN women over 18 (N=460,377) was selected from the central NPIRS file, and records scanned for either laboratory or clinic visit information indicating that a pap was performed during the previous 12 and 36 months. The percentage of women in the sample who had a pap in the previous 12 months is reported as the pap coverage rate. Current recommendations call for a pap every three years for most women, so the 36month rate is reported as well. Because of concerns about the completeness of data in this central system, this will be followed by a manual chart review of a subset of patients in the sample. After this validation study has been completed (spring 2001), we will be able to make a determination about the adequacy of this method for GPRA indicator measurement, and will plan data improvement efforts to improve the accuracy of this measurement technique.

Baseline: The report from FY 2000 will serve as the baseline for subsequent years.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 Increase the Availability of Primary Health Services, 3.6 Improve the Health Status of American Indians and Alaska Natives, 4.1 Promote the Appropriate Use of Effective Health Care, and 4.2 Reduce Disparities in the Receipt of Quality Health Care Services. It is supported by IHS/CDC agreements (National Breast and Cervical Cancer Early Detection Program). This indicator also, directly supports the HP 2010 objective 3-4 (Cancer: cervical cancer deaths).

Program Performance: The FY 2000 performance indicator was to increase the proportion of women who have annual Pap screening by 3% over the FY 1999 baseline. As discussed above, a reliable baseline for comparison was not possible with our available systems during FY 1999. However, we have established a new electronic sample derived baseline for FY 2000:

- 11.9% of AI/AN women over age 18 had a Pap test within one year;
- 17.9% had a Pap test within three years.

Current recommendations for cervical cancer prevention call for a Pap for all women at least once every three years beginning at age 18 or onset of sexual activity. High risk women should

have a Pap annually. If the 3-year recommendation were universally applied, we should expect to see around 30% of women having a pap every year, and nearly 100% every 3 years. Our observed numbers of 11.9% and 17.9% are far short of that goal. More detailed studies have shown that younger AI/AN women get Pap screening at high rates, but then stop getting screened when they are past child-bearing age. To address this problem, IHS is collaborating with CDC to increase the numbers of older AI/AN women who are screened through the National Breast and Cervical Cancer Early Detection Program.

Indicator 7: During FY 2002, increase the proportion of the AI/AN female population over 40 years of age that has received screening mammography in the previous two years by 2% over the FY 2001 level.

Rationale: The purpose of this indicator is to reduce breast cancer morbidity and mortality by early detection. Breast cancer has long been considered to be rare among AI/AN women. Incidence and mortality rates have been documented in some AI/AN populations to be 1/3 to 1/2 of the White rates. Because of historically low rates of breast cancer among AI/AN women, and because of competing priorities, screening mammography was not a high priority for IHS in the past. This picture seems to be changing, however, with breast cancer incidence in the northern plains and Alaska now approaching the rates of the White population. IHS seldom performed screening mammography before 1991, when the CDC National Breast and Cervical Cancer Early Detection Program was initiated. The CDC funded programs have been successful in reaching AI/AN women in many states, and not so successful in others.

Mammography every one or two years is a nationally recognized standard of care based on its association with both reduced mortality and morbidity because breast cancer is identified at earlier stages. Early identification allows for early clinical intervention and secondary prevention of morbidity and mortality.

Approach: Local service sites that have mammography units are responsible for delivering the screening. There were only six such IHS service sites in 2000. All other sites must refer women to mammography facilities through either the Contract Health Service process or through CDC-funded State or Tribal screening programs. Regional coordination and assistance is the responsibility of the IHS Area offices. The IHS Office of Public Health performs the overall coordination of this effort. Linkages with CDC, State Health Departments, and the American College of OB/GYN are critical to success.

The strategic approach includes outreach to improve patient access and the availability of specialized staff and equipment to perform the screenings. The staff required include public health nurses, Community Health Representatives, and health educators to improve outreach, and specialized clinical providers (nursing, physician, and imaging staff) to provide the actual clinical breast exams and mammograms. The availability of screening must also be associated with the capability to provide diagnostic studies such as ultrasound, biopsy, and fine needle aspiration, as well as treatment such as surgery and chemotherapy.

The successful reduction of premature deaths and morbidity among AI/AN women will depend on full implementation of effective screening and follow-up clinical services. This indicator is linked to success in meeting Strategic Objectives one, two, and four of the Agency's component of the DHHS Strategic Plan.

Data Source: In FY 1999 we intended established a baseline mammography coverage rate using information from the Diabetes Audit, a survey of care among people with diabetes. However, mammography was dropped from the diabetes audit beginning in FY 1999 and we were thus had to develop an alternative approach.

In FY 2000 for the first time we attempted to determine the mammography coverage rate for all women by using electronic medical records (National Patient Information Resource System, NPIRS) from the IHS data center. A random sample of 5000 AI/AN women over 40 was selected from this central file, and records scanned for either radiology, clinic visit, or contract health referral information indicating that a mammogram was performed during the previous 24 months. The percentage of women in the sample who had a mammogram in the previous 24 months is reported as the mammography coverage rate. Because of concerns about the completeness of data in this central system, this will be followed by a manual chart review a subset of patients in the sample. After this validation study has been completed (spring 2001), we will be able to make a determination about the adequacy of this method for GPRA indicator measurement, and will plan data improvement efforts to improve the accuracy of this measurement technique.

Baseline: Our previous baseline was from the Annual Diabetes Audit from 1997, which found that 27% of women with diabetes had been screened for breast cancer in accordance with American Cancer Society guidelines. In addition, we were not satisfied with this baseline because of questions about the representativeness of the sample (diabetic women only) and the expense of the manual chart review. The revised automated approach for FY 2000 uses inexpensive and reproducible methods, and will serve as the baseline for subsequent years.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 Increase the Availability of Primary Health Services, 3.6 Improve the Health Status of American Indians and Alaska Natives, 4.1 Promote the Appropriate Use of Effective Health Care, and 4.2 Reduce Disparities in the Receipt of Quality Health Care Services. It is supported by IHS/CDC agreements (National Breast and Cervical Cancer Early Detection Program). This indicator directly supports HP 2010 objective 3-3 (Cancer: breast cancer deaths).

Program Performance: The FY 2000 performance indicator was to increase the proportion of the AI/AN female population over 40 years old who have had screening mammography during the previous year by 3% over the FY 1999 baseline. This comparison was not possible because mammography was dropped from the diabetes audit and alternative approaches were not developed until FY 2000. Using the new measurement methodology discussed above, in FY 2000 14.7% of AI/AN women over age 40 had a mammogram during the previous two years. This data was derived from the IHS NPIRS central database, as a simple random sample of 5000 women drawn from all AI/AN women over age 40 who had at least one IHS visit during FY 2000 (N=207,398).

We used the two-year interval to have data that were comparable with National reports, and to be consistent with current recommendations and clinical guidelines. The mammography rate is lower than our target rate; we suspect that it represents a significant undercount.

This mammography rate only includes mammograms that are entered into the IHS electronic medical record, which includes primarily those performed by or paid for by IHS. It is highly likely that many AI/AN women get mammograms outside the IHS system, either through State Breast and Cervical Cancer Early Detection Programs (CDC-funded), at health fairs, or from private providers that are paid by private insurance or Medicare/Medicaid. In general, these sources do not contribute records to the IHS record system, so they were not counted in this survey. We are exploring ways to include data from the CDC program and from HCFA in this process, in order to obtain a more accurate count.

Well Child Care Indicator:

Indicator 8: During FY 2002, increase the proportion of AI/AN children served by IHS receiving a minimum of four well-child visits by 27 months of age by 2% over the FY 2001 level.

Rationale: This indicator is directed at improving child and family health by expanding access to non-urgent care. Well child visits have been associated with improved post-neonatal mortality and opportunities to improve family health and safety in the longer term and is a recognized national standard of care. Of particular importance are the anticipatory educational interventions given to parents concerning diet and nutrition, injury prevention, and prevention of family violence. The current minimum standard for Well Child Visits is six for first-born children and five after first born. Accepting four visits as an acceptable minimum is based on the high percentage of children who receive Well Child services in conjunction with urgent care visits and thus are not coded as Well Child Visits.

Approach: The responsible parties are the local I/T/U service sites. The IHS Area offices can provide assistance in development and coordination of media campaigns and analysis of information and they are responsible for regional coordination of this effort. The IHS Office of Public Health is responsible for overall coordination of the effort. Linkages with the USDA-WIC program and the DHHS Head Start program are also critical.

The strategies for success are rooted in effective outreach and management of clinic scheduling for service provision. The outreach activity is dependent upon parent education to assure their awareness of the importance of routine and periodic assessment of well children. Secondly, the effective identification of children in the targeted age groups is important. Public health nursing, Community Health Representatives, Head Start programs, and parent groups have important roles in identifying children and families who are the target of this intervention.

Clinical care is dependent upon the availability of trained nursing and physician staff with the time to address this objective. Scheduling and follow up of these children and their families is critical. The cooperation of medical records staff and others in the clinical environment is essential. Achievement of effective well-child health care is critical to the prevention of childhood obesity, injuries, and family dysfunction.

Data Source: RPMS/PCC

Baseline: Determined by the FY 1999 Indicator and reported below

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, and 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services* and broadly addresses the HP 2010 objectives addressing Focus Area 16: Maternal, Infant, and Child Health.

Program Performance: The FY 2000 performance indicator committed to increase by 5% the proportion of AIAN children served by IHS receiving a minimum of four Well Child Visits by 27 months of age, over the FY 1999 baseline. The well child visit indicator was exceeded. In FY 2000, 5, 840 children or 47.7% out of 12, 237 children received a minimum of four well-child visits by 27 months of age. This is an increase of 9.2% over the FY 1999 proportion of 38.5% (3, 799 of 9,873 children). These findings should be considered provisional and may be revised pending the verification and approval of FY 1998-FY 2000 workload by the Areas. Also, modifications to refine the algorithm may be incorporated in the next GPRA cycle.

Substance Abuse Treatment Group:

These two indicators address substance abuse treatment. The first in terms of reducing relapse rates by improved aftercare for youths completing residential treatment programs. The second addresses identification and referral of pregnant woman at risk for alcohol related birth defects.

Indicator 9: During FY 2002, youths discharged from Regional Treatment Centers (RTC) will:

a. receive follow-up equal to or greater than the FY 2001 level

b. increase by at least 5% over FY 2001, the youths who have documented 6 months of less alcohol and drug use than before treatment

Rationale: This indicator is intended to reduce drug and alcohol use relapse in youths discharged from the 11RTCs serving 11 of the 12 IHS Areas. Studies indicate that the longer individuals are engaged in treatment (including aftercare/continuing care) the better the prognosis (Hoffmann, DeHart, & Gogineni, 1998; Zywiak, Hoffmann, & Floyd, 1999). One RTC evaluation concluded, "aftercare is the biggest problem" with limited coordination among RTC, service units and local aftercare programs. This measure aims to assure the effective and efficient delivery of follow-up treatment services at the local level following RTC release. A follow-up consists of a structured case management activity whereby continuity of care, treatment modalities and treatment services are assessed. This assessment of integrated aftercare activities is designed so that an individual's changing needs will be met as that individual moves through the recovery process thereby decreasing relapse.

Approach: The Division of Clinical and Preventive Services, Office of Public Health will be responsible for coordinating data collection from the RTCs who are the responsible parties. The Alcoholism and Substance Abuse Program has developed an ongoing evaluation instrument in consultation with the RTC. The evaluation process began implementation in FY 1998 and includes follow-up information that will be reported to program staff and compiled for tracking this indicator. In addition, those RTC utilizing the RPMS Chemical Dependency Management Information System (CDMIS) and the RPMS Mental Health/Social Service (MH/SS) packages, routinely collect follow up information that can be exported for national reporting purposes. Aftercare services (for those utilizing CDMIS) occurring at local sites will also provide

additional data to support tracking of this indicator as appropriate. Efforts to improve reporting by local tribally managed programs will continue to be solicited.

Findings from the Comprehensive Assessment & Treatment Outcome Research adolescent study indicate that youth engaged in aftercare/follow up activities had better sobriety rates than those who did not, but for optimal benefit, contact frequency of at least twice per week was required (Hoffmann, Mee-Lee, & Arrowood, 1993). The majority of aftercare services are the responsibility of local programs as youth who have completed YRTC treatment return to their community for aftercare services. Although one-year follow-up information was limited in the IHS RTC Evaluation completed in FY 1997, data did suggest that youth that completed treatment and were involved in continuing care and follow-up services maintained higher sobriety rates.

Data Source: Data for this indicator are collected from the RPMS, the RTC evaluation system, and other software utilized by the RTCs and provided to the Areas and Headquarters. Both Area and Headquarters behavioral health staff review the data for completeness and have frequent dialogue with each other or directly with the RTC s to resolve identified data problems. These different sources of data are then analyzed and compiled into one report at Headquarters. Efforts to standardize the RTC data collection format for all RTCs and Areas is a priority during FY 2001 and FY 2002 and will simplify and improve the verification and validation process.

Baseline: The initial baseline for follow-up was established in FY 1999. A baseline assessment for abstinence rates following discharge will be collected during FY 2000 for comparison in FY 2001.

Type of Indicator: Process/Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 1.4 *Curb Alcohol Abuse*, 1.5 *Reduce the Illicit Use of Drugs*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This indicator also directly supports HP 2010 objective 26-10 (Substance Abuse: reduce youth use of illicit substances).

Program Performance: The FY 2000 performance measure was to increase by 10% the youths discharged from adolescent RTCs who have receive at least three follow-up visits in the first year following treatment over the FY 1999 baseline. This target was accomplished in FY 2000 with 48.0% of the youths discharged from RTC who receiving follow-up contacts at 30 days, and at least a second follow-up by 6 months, and at least a third at 12 months after discharge compared to 40.9% in FY 1999 which represents a 17% increase in follow-up. In addition, the percentage of youths who received follow-up in the critical first 30 days following discharged also increased from 64.5% in FY 1999 to 69.5% in FY 2000 for an increase of 7.8%.

Indicator 10: During FY 2002, increase the proportion of I/T/U prenatal clinics utilizing a recognized screening and case management protocol(s) for pregnant substance abusing women by 5% over the FY 2001 level.

Rationale: The purpose of this indicator is to contribute to systematic efforts at reducing the incidence of Fetal Alcohol Syndrome (FAS). Surveillance conducted at 2 IHS Areas indicated FAS rates greatly exceed general population rates (2.3 and 2.7/1000 live births vs. 0.6/1000 live

births approximately). The Institute of Medicine 1996 report on FAS includes case identification and appropriate intervention and treatment of a maternal alcohol abuse as a critical part of FAS prevention. Thus, the purpose of this indicator is to assure that providers consistently screen and make appropriate referrals for women at risk. The written protocol makes this more likely because these efforts become part of the local quality assurance process. However, successful implementation of such a process requires staff training as well as cooperation from tribes and local governing bodies and thus requires resources and time.

Approach: The I/T/Us will be responsible for reporting via survey to be conducted by the Division of Clinical and Prevention Services, Office of Public Health relative to the implementation of protocols. Resources for analysis may be required from other divisions within the Office of Public Health. The Prenatal Health Assessment (PHA) screening instrument was developed in the Aberdeen IHS Area with the Centers for Disease Control and Prevention. A curriculum for utilizing the instrument in prenatal clinics and developing case management systems has been piloted in that Area in FY 1998. In the Aberdeen Area, there are numerous clinics and hospitals that are currently using the protocols. In FY 1999 the protocols will be piloted in two new Areas. This screening instrument is one of several recognized protocols that are being encouraged for use in I/T/U programs to assure the routine prenatal substance abuse screening and case management tailored to the resources of each site. The PHA is currently being reviewed by the Medical Records and will be provided for use nationally by the IHS end of FY 1999. A baseline will be established via the survey in 1999 and repeated in 2000.

Data Source: Survey and possibly RPMS

Baseline: Determined by FY 1999 Performance Indicator = 79.6%

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 1.4 *Curb Alcohol Abuse*, 1.5 *Reduce the Illicit Use of Drugs*, 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services*. This indicator also directly supports several HP 2010 objective 16-16 (Maternal, Infant, and Child Health: Fetal Alcohol Syndrome).

Program Performance: The FY 2000 indicator committed to increasing the proportion of I/T/U prenatal clinics utilizing a recognized screening and case management protocol(s) for pregnant substance abusing women by 5% over the FY 1999 level which was 78.4% based on 11 Areas reporting . For FY 2000, all 12 Areas reported for a total of 227 prenatal clinics, 199 had implemented such protocols for a rate of 87.6% that is an 11.7% improvement over FY 1999. Also, in this year all areas reported on this indicator and one area actually went from 70% to 100%, but one area showed no improvement from the FY 1999 baseline.

Oral Health Group:

Because oral diseases seldom result in death or severe disability, the importance of treating and preventing them is often overshadowed by other health priorities, particularly in times of a growing demand for a diversity of urgent care medical services. However, as was made evident from the IHS Dental Program's participation in the 1989-91 World Health Organization oral health status study, the oral conditions of Indian participants were far worse then the U.S.

General population and profoundly influenced their quality of life, including their ability to attend school, work, sleep, eat, and socialize. An overview of the findings of this study was provided in the section titled: "The Role of Poverty, " on page 30 of this document.

Given these poor oral health conditions, it is not surprising that dental health has been consistently identified as a high priority in surveys of American Indian and Alaska Native (AI/AN) consumers' health needs. Furthermore, dental care has been consistently identified in recent stakeholder developed budget formulation activities as one of the top five health priorities for the IHS to address with budget requests.

Indicator 11: During FY 2002, increase the proportion of AI/AN population receiving optimally fluoridated water by 10% over the FY 2001 levels for all IHS Areas.

Rationale: Fluoridation is one of the most cost effective public health measures for reducing the prevalence of dental decay in all age groups. Costs range from a mean of 31 cents per person per year to $2.12 per person in communities with less than 10,000 people. For many Indian communities, the cost may be up to $5 per person per year since most of the water systems in Indian country serve less than 1,000 people. It has been estimated that for every dollar spent on fluoridation, there is a $50 savings in dental treatment. Fluoridation of community drinking water is a major factor responsible for the decline in dental caries (tooth decay) during the second half of the 20th century. In a 1991 oral health survey conducted by the Indian Health Service, there was a 31% decline in caries rates in adolescent children in those communities with access to fluoridated water. However, despite the known benefits of fluoridation, the number of fluoridated water systems in Indian country has declined by 68% over the last nine years. In 1991, 717 water systems were fluoridated and routinely monitored for fluoride ion levels. By 1999, only 226 systems were fluoridated and monitored. This decline in systems has had an adverse impact in the percent of the population that needs the benefits most and are now receiving the least benefits from this proven public health measure.

Approach: The IHS Dental Program, Office of Environmental Health and Engineering Branch, and the Centers for Disease Control and Prevention's Division of Oral Health entered into an interagency agreement in FY 2000 to support a demonstration fluoridation project in the Albuquerque and Phoenix Areas. The funds were used to hire a contractor in each Area to provide on-site visits to each tribe to promote community water fluoridation. The contractor provided information to the community on water fluoridation, assessed need for training and technical assistance for the water operator, and managed the split sample and surveillance system. The contractors will receive training using the CDC's web-based Water Fluoridation Reporting System (WFRS).

The expansion of this indicator to address all IHS Areas in FY 2001 and FY 2002 is the result of earmarked funding of $500,000 in FY 2001 to support water fluoridation IHS-wide. Rapid export of lessons learned during the demonstration project will be necessary to impact the FY 2001 levels for all other Areas. Areas will expand upon and revise the strategies adopted by the pilot sites in initiating their programs. Each Area will have one individual responsible for fluoridation surveillance and reporting. Funds to each Area may be used to hire a "circuit rider," as was planned at the pilot sites, or in other ways to enhance fluoridation efforts. Each Area will submit an annual plan of action and an annual report of activities and outcomes. For FY 2002, the measure of the indicator will address increasing the proportion of the AI/AN population

receiving optimally fluoridated water from the previous focus of increasing the number of water systems in compliance with fluoridation standards. The compliance standards will remain the same but measuring population encourages efforts be directed where the largest possible population benefit can be achieved from the available resources.

Date Source: Water Fluoridation Reporting System (WFRS) and database maintained by CDC.

Baseline: FY 2001 level available January 2002

Type of Indicator: Impact

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* 4.1 *Promote the Appropriate Use of Effective Health Care,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* It also addresses HP 2010 objective 21-9 (Oral Health: community water fluoridation).

Program Performance: The FY 2000 indicator committed to improve water fluoridation compliance by 15% over FY 1999 levels for Areas participating in IHS / CDC Fluoridation Surveillance Demonstration Project (Albuquerque and Phoenix Areas). In FY 1999 only 13 water systems in these Areas met the standard of being in compliance. For FY 2000 this increased to 18 systems or a 38% increase in systems.

Indicator 12: During FY 2002, increase the proportion of the AI/AN population who obtain access to dental services by 1% over the FY 2001 level.

Rationale: This indicator is directed at improving the oral health status. Evidence from large-scale dental insurance studies support that people who utilize dental services annually have improved oral health status compared to those who do not. The growing AI/AN population has resulted in higher demands for dental care and increasing difficulties in recruiting dentists has compounded this problem. As a result, there has been almost a 10% reduction in the percent of the AI/AN population annually receiving dental services in recent years. Restoring access to both primary and secondary treatment and preventive services can lessen the disease progression. Improving access and thus increasing utilization of dental services can also result in less costly care, improved oral health status, and quality of life.

The IHS conducted a program-wide oral health survey in FY 1999 to determine oral health status of the AI/AN population. Preliminary analysis of national oral health survey data suggest:

- moderate increases in tobacco use from 1991 to 1999 in young adults ages 35 – 44; severe increases in tobacco use in adolescents ages 15 – 19. Widespread vacancies preclude the possibility of consistent counseling within the dental program.
- significant increases in the number of decayed, missing, and filled teeth in all age groups from 1991 to 1999. Increases in measured disease experience are inversely correlated with access to dental care.
- significant decreases from 1991 to 1999 in both the number of people served by fluoridated water systems, and the number of young children receiving preventive dental sealants. It is reasonable to assume both unfortunate decreases are exacerbated by the widespread vacancies among oral health care providers.

- In 1991, 717 water systems serving Native Americans were fluoridated and were routinely monitored for fluoride ion levels. By 1999, only 226 systems were fluoridated and monitored.
- In 1999, 78% of adolescents ages 15 – 19 had received one or more dental sealants. This figure, a legacy of the clinical efforts of approximately a decade ago, remains significantly higher than levels of coverage suggested by any national health objective for the U.S. population. In 1999, only 39% of youngsters ages 6 – 8 had one or more sealants.

Approach: Providing access to care is directly dependent upon the dental care resources in a community which include the availability of dental providers and facilities, and their efficiency in providing services. The dental funding enhancements of FY 2001 will be continued in FY 2002 to increase access to dental services through a combination of strategies that include:

- increase the I/T/U dental workforce by increased effectiveness in the recruitment of staff to fill vacant and newly funded dental positions using advance communications technologies, greater use of alternative pay systems, and expanded loan repayment opportunities.
- increase retention and productivity of dental providers through the expansion/enhancement of support centers to provide training and technical assistance to enhance efficiency and effectiveness of preventive and clinical care, and restoration of short and long-term staff training opportunities.
- update and simplify the automated dental record keep system to enhance clinical efficiency and planning and evaluation capability.
- expand essential dental specialty services through contracts with the private sector.
- target specific populations, (i.e., school-age children, diabetics or other special target groups), utilizing third party payers, and identifying Medicaid-eligible families which would result in increased resources to hire additional staff.

For the numerator of this calculation, the dental program will count the number of patients who access I/T/U and contract systems through the dental exam and first visit procedure codes within the Dental component of the PMS patient data record as a valid proxy measure of annual dental care utilization. The denominator will be the IHS three-year user population.

Data Source: IHS Dental Data System component of the RPMS. The IHS Dental Data coordinator compiles dental data monthly from the IHS data processing center and sends to the Area Dental Consultants for verification. Missing data or data that does not look reasonable are addressed by checking back with local programs.

Baseline: FY 2001 level available January 2002

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.*, This indicator also relates to the HP 2010 objectives 13.12 (Oral Health: referral and follow-up: children) and 21-10 (Oral Health: use of oral health care system).

Program Performance: The FY 2000 indicator committed to achieving the target level of 23% of the AI/AN population receiving dental services. This performance measure was achieved with 25.1% of the user population having accessed dental care during FY 2000. This was derived from 361,823 first appointments recorded in all 12 Areas during FY 2000 divided by the IHS calculated user population 1,452,839 minus 10,585 which is the estimated population of one tribal program that did not submit dental data. Thus, the rate is calculated on 99% of the user population.

The vacancy rate for dental providers of approximately 18% is the key determinant limiting access to care. A full time dental recruiter has been hired; many new strategies to decrease vacancy rate are in the process of being implemented. These include recruitment visits to every U.S. dental school, a professionally designed and produced recruitment package, increased remuneration for incoming dentists, increased opportunities for loan repayment, and other strategies.

Indicator 13: During FY 2002, increase the percentage of AI/AN children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth by 1% over the FY 2001 level.

Rationale: The intent of this indicator is to reduce dental decay in children. Dental sealants, a recognized standard of dental care, are an effective measure for reducing dental decay rates in children and can be effectively applied by dental auxiliaries at relatively low cost. Sealants and fluorides can prevent almost all tooth decay and play a role similar to vaccinations. Because surveys of AI/AN children's oral health status have consistently identified significantly higher decay rates than the U. S. general population, sealants are essential to reducing the ravages and costs of treating dental decay. The IHS Dental Program was one of the few dental programs in the nation to have achieved the HP 1990 and 2000 dental sealant objectives. However, based on FY 1999 IHS Oral Health Survey, no significant progress has been achieved since the FY 1991 IHS Oral Health Survey and coverage actually declined for the younger age group. In 1999, 78% of adolescents ages 15 – 19 had received one or more dental sealants. In 1999, only 38% of youngsters ages 6 – 8 had one or more sealants. Again, increasing difficulties in the recruitment and retention of dentists, and the loss of infrastructure, particularly the Area Health Promotion / Disease Prevention officers have probably contributed to the decline in the number of sealants placed in the younger age group.

Given the current workforce in the Indian Health Service dental program, innovative changes in use of auxiliary as well as delivery sites need to occur.

Approach: Local dental clinics are responsible for implementing/maintaining effective and efficient sealant programs that are either school-based or school-linked and targeted for children ages 6-14 years (to coincide with the eruption of first and second permanent molar teeth). Use of a specialized procedure code, which was created specifically to measure use of sealants in school-age children, will enable local programs to track progress in meeting this objective. The Dental Data Software package in the RPMS environment can capture the number of children examined and the number of children who receive dental sealants on a quarterly and annual basis and thus document trends.

In order to increase the percent of Indian children and adolescents that have molar sealants, an innovative approach will be required. The use of contract 4-handed dental sealant teams will be

hired from the private sector. In addition, dental Community Health Aides may be trained to assist dental hygienists and dental assistants in placing sealants. Additional portable equipment to be used in the schools is an efficient way to reduce demands on limited clinic space and going to where the children are – the schools.

Data Source: IHS Dental Data System component of the RPMS.

Baseline: FY 2001 level available January 2002

Type of Indicator: Impact and Balance Scorecard: innovation and learning perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* The indicator also addresses the HP 2010 objective 21-8 (Oral health: dental sealants).

Program Performance: The FY 2000 performance measure was to assure that the percentage of children 6-8 and 14-15 years who have received protective dental sealants on permanent molar teeth is increased by 3% over the FY 1999 IHS Oral Health Survey level. For FY 2000, only one of the two performance targets was achieved. In FY1999 39.6%* of the children of the 1,513 children ages 6 - 8 in the oral health survey had sealants on their molar teeth. In FY 2000, 44.1% of 7,609 children 6 - 8 years from 5 Areas had sealants on their molar teeth, an increase of 4.5% over FY 1999. However, in FY 1999 65.0%* of 873 children ages 14-15 years in the oral health survey had sealants on their molar teeth, while in FY 2000 only 49.1% of the children in this age group had sealants on their molar teeth, a decrease of 15.9%.

The findings for both age groups must be taken with caution for FY 2000 because they are based on samples from only 5 of the 12 Areas and represent less precise estimates of sealant coverage than the IHS national oral health surveys, which are conducted only once every 7-9 years. Prevalence of children with sealants remains difficult to assess short of running national oral health surveys annually, which is prohibitively expensive. The current method used to derive FY 2000 estimates relies upon the use of codes that are inconsistently utilized. IHS epidemiologists and statisticians are now working to improve the methods for assessing the prevalence of children with sealants in the intervening years between oral health surveys. This approach must be made using replicable and efficient methods undisruptive of the provision of clinical care.

> ***Note** that these findings have changed slightly from preliminary data reported last year prior to having all outstanding data included in the analyses an now verified for the oral health survey.

> **Indicator 14: During FY 2002, increase the proportion of the AI/AN population diagnosed with diabetes who obtain access to dental services by 2% over the FY 2001 level.**

Rationale: The purpose of this indicator is to improve both oral health status and diabetic control for AI/AN diabetics. Evidence from large-scale dental insurance studies support that people who utilize dental services annually have improved oral health status compared to those who do not. Furthermore, evidence from a study conducted an IHS setting supported by NIH in collaboration with the State University of New York at Buffalo has shown that that diabetic patients experience periodontal disease more frequently and with greater severity than non-

diabetics. In addition, this study has shown that reduction/elimination of periodontal disease through clinical treatment results in improved glucose control. Additionally, a growing body of evidence has identified periodontal disease as a significant risk factor for heart attack and stroke.

There has been almost a 10% reduction in the percent of the AI/AN population annually receiving dental services in recent years. This reduction in services has also been manifested in a reduction of services for diabetic patients. Restoring access to both primary and secondary treatment and preventive services for diabetics can lessen periodontal disease progression and the subsequent affects on diabetes and overall health. Improving access and thus increasing utilization of dental services can also result in less costly care, improved health status, and quality of life.

Approach: Individual I/T/U hospitals and clinics provide access to care for diabetic patients in a wide variety of ways. Additionally, the level of dental care that is provided to diabetics varies greatly. An emphasis by dental clinics to provide prioritized access to care for diagnosed diabetics would go a long way to improve the oral health of this population. At a minimum, a yearly examination provides an educational opportunity to enlighten the diabetic on their oral health status and proper home care to reduce periodontal disease and it's affect on diabetic control. Those programs with additional time and resources can provide anything from extraction of teeth that are severely involved with periodontal disease to comprehensive periodontal therapy and dentures.

Data Source: Diabetes registries, yearly IHS Diabetes Care and Outcomes Audit

Baseline: FY 2001 actual performance level will serve as baseline and will be available July 2001. For the purpose of showing trend data the FY 1999 performance level was 30% and the FY 2000 level will be available 7/01.

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.*, This indicator also relates to the HP 2010 objective 21-10 (Oral Health: use of oral health care system).

Program Performance: No FY 2000 Indicator

Indicator 15: During FY 2002, reduce the rate of untreated dental decay in children 6-8 year and 14-15 year by 2% below the FY 2001 electronically developed baseline.

Rationale: The purpose of this indicator is to maintain oral health and quality of life for AI/AN children. Evidence supports that untreated dental decay results in higher probability of tooth loss and loss of oral functioning. The 1991 IHS Oral Health Survey documented that 72% of AI/AN 6-8 year olds and 61% of 14 to 15 year olds had untreated decay. Even with the implementation of sealant and fluoride programs for school age children, the 1999-2000 IHS Oral Health Survey identified 62% of 6-8 year olds and 67% of 14-15 year olds with untreated decay. Children with untreated decay can suffer from pain, poor aesthetics, and loss of productive school time. Treating the carious lesions that exist in Native American children will improve their oral health,

their chewing function, their willingness to smile, and will allow them to go about their daily activities without the burden of pain from toothaches. Reduction of untreated dental decay in children will ultimately improve their overall quality of life.

Approach: The principal way to address untreated dental decay is through improved access to dental clinical services. Primary oral health prevention activities will also result in a reduction in untreated decay over time. Additional dental staff, facilities, equipment, and resources to provide preventive and clinical restorative care will be directed to properly deal with this health disparity in the AI/AN population. A list of available interventions include:

- prioritized clinical access for school-aged children
- school-based screening programs to identify children with active decay.
- school-based dental sealant programs.
- school-based fluoride varnish, fluoride rinse, and fluoride gel programs.
- expanded community water fluoridation activities.
- expanded use of new technologies in dental materials including decay control varnishes and glass ionomer restorations.

Data Source: Dental Data System/RPMS data system . On an annual basis, number of code #IH72 divided by the number of dental patients in each age group will yield the percentage of those with untreated decay.

Baseline: 1999-2000 IHS Oral Health Survey showed that 62% of 6-8 year olds had untreated decay and 67 % of 14-15 year olds had untreated decay

Type of Indicator: Impact and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.2 *Increase the Availability of Primary Health Services*, 3.6 *Improve the Health Status of American Indians and Alaska Natives* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* This indicator also relates to the HP 2010 objective 21-2 (Oral Health: reduce the proportion of children, adolescents, and adults with untreated dental decay).

Program Performance: No FY 1999 Indicator

Family Violence, Abuse, or Neglect Indicator:

Indicator 16: During FY 2002 the IHS will assure that:

a. at least 82% of I/T/U medical facilities (providing direct patient care) will have written policies and procedures for routinely identifying and following:

- **spouse/intimate partner abuse**
- **child abuse and neglect**
- **elder abuse or neglect**

b. at least 56% of I/T/U medical facilities will provide training to the direct clinical staff on the application of these policies and procedures.

Rationale: The purpose of this indicator is to help reduce the prevalence of family violence, abuse, and neglect by identification and referral for services. Victims of these conditions come to the health care system with a variety of physical injuries, illnesses or medical conditions directly related to abuse. The umbrella of family violence includes child, spouse or elder abuse and/or neglect. Experts in the field of family violence have identified an important link between violence against women and the abuse of their children. Research indicates that children who witness violence in the family are affected in the same way as children who are physically and sexually abused (Goodman and Rosenberg, 1987). The propensity for family violence can extend to older members of the family (parents, grandparents, aunts, uncles) living in the home. The consequences of family violence can be seen in physical, psychological and cognitive results such as intentional and unintentional injuries, detachment, avoidance, depression, and suicidal ideation.

Thus, the approach of this indicator is to increase the likelihood that providers consistently screen for indications of violence, abuse or neglect and making appropriate referrals. The written protocol makes this more likely because these efforts become part of the local quality assurance process. However, successful implementation of such a process also depends on staff training as well as cooperation from tribes and local governing bodies and thus requires resources and time. In the future, training will be part of the target measure for this indicator.

Approach: The Mental Health and Social Service program will work with IHS Area Offices to assure that staff members are appropriately trained and local policies and procedures are established for these health concerns. Tribal and urban programs will also be encouraged to address these areas and IHS will respond to requests for assistance. Existing funds and staff will be utilized. Achievement of the indicator will increase local identification of family violence and referral for appropriate prevention services and treatment of family violence, including the perpetrators, the individual victims, as well as the families and communities that suffer the consequences.

Data Source: Annual survey and/or progress review by IHS Area and Headquarters staff.

Baseline: Determined in FY 1998 to be at 47%. At that time 31 of 66 IHS Service Units reporting had Policies and Procedures in place to address this indicator. A survey in FY 1999 of 223 clinics and hospitals showed that 64% had written policies and procedures for domestic violence.

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 2.4 *Improve the Safety and Security of Children and Youth,* 3.2 *Increase the Availability of Primary Health Services,* 3.6 *Improve the Health Status of American Indians and Alaska Natives,* and 4.2 *Reduce Disparities in the Receipt of Quality Health Care Services.* This indicator also addresses several HP 2010 objectives in Focus Area 15: Injury and Violence Prevention.

Program Performance: The fiscal year 2000 Indicator was to assure that at least 70% of I/T/U medical facilities with urgent care or emergency departments or services have written policies and procedures for routinely identifying, treating, and / or referring victims of domestic violence, abuse, or neglect (i.e. child, spouse, elderly). Performance on this indicator in FY 2000 was assessed through a survey of I/T/U health centers, village clinics, and ambulatory and hospital based facilities. This included facilities with and without urgent care and/ or emergency departments.

In 1999, a survey of 223 facilities showed that 64% had written policies for domestic violence. The FY survey was similar though more detailed about elder and/ or child abuse and was initially mailed to 314 hospital and ambulatory care sites. The overall response rate was 42 %; this includes the following break down:

a. hospital based response rate of 49% (24/49)
b. ambulatory facility response rate of 39% (107/265)

The above response rates are reflective of facilities with emergency and/ or urgent care centers. The questions were designed to assess different policies and procedures. Facilities with emergency rooms and/or urgent care centers that responded indicated the following compliance with written policies and procedures:

a. spouse/ intimate partner abuse – 68%
b. child abuse / neglect – 80%
c. elder abuse/ neglect – 68%

Averaging these three categories give an aggregate rate of 72%. In addition, approximately 54% of these responding facilities offered staff training on child and elder abuse and neglect, as well as spouse/ intimate partner abuse.

On aggregate the IHS achieved this indicator lead by the high percentage of clinics having policies to address child abuse and neglect, but is behind the 70% level for spouse/ intimate partner abuse, as well as elder abuse and neglect. The reasons for this include the following:

a. Lack of survey response- the method of survey should be changed next year to include follow-up phone calls, as well as an accessible on-line database for updating information about policies and procedures, and for verifying compliance with this indicator. Time frame for completion – 9/01
b. Possible inaccurate information - throughout IHS, 100% of hospitals are Joint Commission on the Accreditation of Health Care Organizations (JCAHO) accredited. These facilities must have a compliance rate of 100% for policies and procedures in these three areas (as these policies and procedures are mandated by JCAHO). In addition, JCAHO recommends similar policies and procedures in ambulatory settings (as does National Council on Aging). There are substantial external pressures from credentialing bodies to achieve this indicator.
c. Lack of prototype policies and procedures – the IHS Women's Health web site will soon function as a repository for 'prototype' policies and procedures for these three areas. At that time, we will send out a notification to clinical directors about the accessibility of this information on-line. Time frame for completion – 6/01

Information Technology Development Group:

The following three indicators address the development of improved automated data capabilities that support clinical care and performance measurement and include efforts to:

- develop test sites to expand automated GPRA clinical data extraction capacity for clinical GPRA measures
- expand distribution and use of the mental health and social services module of the RPMS system across I/T/U settings to improve performance management of behavioral health
- expand IHS compatible data management capabilities at urban Indian program sites to support the contribution of data to the larger IHS and tribal aggregations for planning and performance management efforts, including GPRA.

Note, this is a new FY 2002 and FY 2001 Indicator

Indicator 17: During FY 2002, IHS will

- **Collect baseline data for any performance measures where electronic data collection was implemented in FY 2001,**
- **Complete and report on the pilot web-based training program**
- **Complete implementation of LOINC standards in IHS's clinical information system**

Indicator 17: During FY 2001, IHS will:

- **Conduct a pilot study at five sites to evaluate the potential of electronically extracting data from the RPMS to report on five clinical performance measures,**
- **Begin one or more intervention studies at appropriate sites to resolve data quality problems that are identified in this and previous studies,**
- **For any of these performance measures where the data quality is deemed to be sufficient to proceed, implement electronic data collection so that baseline data can be collected for FY 2002.**

Rationale: This indicator serves as part of a long-term effort to expand the IHS capacity to derive GPRA performance data directly from clinical automated information systems. This will allow IHS to add new performance measures in the most cost-effective way and without imposing additional data collection burdens on health care staff. It will also support other IHS management efforts – delivering high quality clinical care, managing programs, quality improvement, efficient and effective billing, monitoring epidemiological trends, performing clinical research, etc. This effort is on the cutting edge of medical informatics. To our knowledge, no other healthcare organization, public or private, has developed a large enterprise-wide system that has the capacity to report on a wide range of clinical measures from existing clinical information systems.

Approach:

The IHS's Resource and Patient Information System (RPMS) is a comprehensive information system that integrates clinical, administrative, and financial data in healthcare facilities. The Patient Care Component of the RPMS is an automated system for the collection, storage, and output of data gathered and recorded on a variety of forms or directly into the system at the point of patient contact in the outpatient, inpatient, and field visit settings. It has been implemented with a basic level of uniformity at over half of over 500 IHS, tribal, and urban facilities. Key challenges to our efforts to extract data for performance measures electronically are:

- We need to extract information from over 500 different sites, each with their own, at least somewhat unique, clinical information systems/repositories.
- There are no any widely accepted, uniform standards for how many critical classes of clinical information are coded or stored anywhere throughout the healthcare industry.

- Approximately half of our over 500 sites are independently administered and managed tribal or urban sites, not directly managed by IHS.

It is likely that the currently existing data repository architectures and quality in our clinical information systems will already allow us to extract several clinical measures electronically with sufficient accuracy in the short term. We are also certain that many other measures cannot yet be derived electronically with sufficient accuracy because of difficulties in compiling data across facilities due to lack of data standards, or problems with the accuracy and completeness of the data in those systems.

To analyze this issue, we are performing a complex study that compares electronically-derived with manual-chart-review-derived measures for five potential clinical measures at five diverse sites. The data collection phase of that study is nearly completed and we have begun to analyze the data. Early draft results and conclusions from that study should be available by winter of 2001 with the final results being completed by the summer of 2001.

Data from this and other studies have already identified problems with both the appropriate recording of data by service providers and the entry of those data by data entry staff. IHS has already begun to implement a pilot web-based training for local facility staff to improve both the recording and entry of data. This intervention includes an evaluation component that will allow us to assess its effectiveness. This pilot intervention will be fully implemented by the winter of 2001. Early draft conclusions about its effectiveness should be available by the winter of 2001, with final results available by summer 2002.

Through the influence of HIPAA legislation and other public and private efforts, more national and international, uniform data standards are being and will be developed. For example, LOINC standards for laboratory and other data are now uniformly accepted by most of the healthcare industry and are being implemented within IHS. The IHS LOINC implementation is a process that will likely be complete within a year (fall 2001) and most facilities, which use the IHS PCC laboratory package, will likely have implemented these standards within the following year (fall 2002). With this standardization, our ability to compile laboratory and other data across facilities will be dramatically improved, thus expanding the number of clinical measures we could potentially perform electronically.

Throughout this process, as we identify performance measures where the data quality and availability of standards is deemed to be sufficient to proceed, we will promptly implement electronic data collection.

Baseline: To be determined by this Indicator

Type of Indicator: Process and Balance Scorecard: innovation and learning perspective

Linkages: Ultimately this objective will support the automated collection of all other clinical measures and contribute to 3.6 *Improve the Health Status of American Indians and Alaska Natives.*

Program Performance: Not applicable because this was not a FY 2000 indicator.

Indicator 18: During FY 2002, increase the number of I/T/U programs utilizing the Mental Health/Social Services (MH/SS) data reporting system by 5% over the FY 2001 rate.

Rationale: The purpose of this indicator is to improve planning, implementation and evaluation of mental health, alcohol and substance abuse, and social services efforts across I/T/U programs. The implementation of the MH/SS data reporting system will provide the vehicle for collection of baseline morbidity, mortality, services and workload data for IHS. Audits of the existing I/T/U data systems have documented both under-reporting and lack of specificity of mental health related conditions reported and services provided. Thus, the continued implementation of this management information system tool will provide a plethora of baseline information that will enhance and complement national private and public outcomes monitoring efforts and allow consistent reporting, data aggregation for planning, managed care, and more effective billing and collection for services. This objective is also essential for monitoring many of the HP 2010 objectives addressing "Mental Health and Mental Disorders."

Approach: Accomplishment of this indicator is contingent on several factors. The implementation of the RPMS data system should be mandatory and a priority within the IHS service system. Responsibility for the maintenance of the data system will be shared by the MH/SS program and Division of Information Resources, to assure clinical, technical and administrative viability. The proposed implementation level of an addition 5 percent of I/T/U sites is based on the resources available to provide the incremental hardware and software upgrades, as well as staff training.

Data Source: MH/SS component of RPMS. Each year a survey with a preformatted spreadsheet is sent to all 12 I/T/U areas information system coordinators (ISCs) to complete and update as more programs come online with the MH/SS package. Also, the IHS Indian Health Performance Evaluation System (IHEPS) and ORYX project has built a SAS dataset to analyze data that is extracted to the national IHS data center.

Baseline: FY 2001 level available January 2002

Type of Indicator: Process and Balance Scorecard: innovation and learning perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 2.4 *Improve the Safety and Security of Children and Youth*, 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's Population.* This indicator also supports several HP 2010 objectives in Focus Area 18: Mental health and Mental Disorders.

Program Performance: The FY 2000 performance measure was to increase the percent of I/T/Us that have implemented the use of the MH/SS data reporting system by 10% over the FY 1999 level that was 51%. This measure was not achieved, with 115 of 227 I/T/U programs or 51% having implemented this system according to Area Information Systems Coordinators. The breakdown by type of program is 85% for IHS run programs, 35% for tribal programs, and 60% for Indian urban programs. Expanding the use of this system continues to be a crucial

component of the overall Behavioral Health efforts throughout the IHS, including tribal and urban programs.

A major setback in not achieving this goal is that a new version of the MH/SS MIS package, which combines relevant data items from the Chemical Dependency MIS and the MH/SS MIS was not tested and implement in FY 2000, as had originally been planned. In the I/T/U areas a Behavioral Health MIS, with the capacity to capture chemical dependency, mental health, and social services data would be accepted.

Plans to improve this indicator is to follow through on the testing and implementing of the new Behavioral Health MIS in FY 2001, with plans to fully implement this package in FY 2002. Expanding the use of this system continues to be a crucial component of the overall Behavioral Health efforts throughout the IHS, including tribal and urban programs.

> **Indicator 19: During FY 2002, increase by 10% the proportion of Urban Indian health care programs that have implemented mutually compatible automated information systems which capture health status and patient care data over the FY 2001 level.**

Rationale: The purpose of this indicator is to assure that Urban Indian Health programs develop automated health information systems that support local health program needs as well a provide data for the larger IHS requirements, including GPRA. Adequate health status and health services data are essential for the effective planning and management of any health care delivery system. Currently Urban Indian health programs capture data under the Urban Common Reporting Requirements (UCRR). These data are not currently compatible with other IHS health services data sets and only of limited use for the purpose of health systems management. Thus, the large urban AI/AN population has been minimally represented in AI/AN data sets.

Approach: A workgroup has been formed, comprised of Urban Programs health directors to review and revise the UCRR. The revised UCRR will capture an expanded set of data that are compatible with the IHS RPMS System, as well as provide local urban program managers better information about the health status and health services provided to their clients. Until a comprehensive needs assessment is completed it is difficult to estimate the resource requirements of this project; however, attempts will be made to, where feasible, avail the IHS RPMS system to urban programs so that systems are not duplicated. These indicators were developed to help monitor successful development of then updated urban data reporting system. The proposed implementation of a 10% increase is based on a schedule to provide the incremental hardware and software upgrades as well as urban program staff training.

Data Source: Self-report of Urban health programs.

Baseline: FY 2001 level available January 2002

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Strategic Objectives 3.6 *Improve the Health Status of American Indians and Alaska Natives*, and 5.1 *Improve Public Health Systems' Capacity to Monitor the Health Status and Identify Threats to the Health of the Nation's*

Population and directly addresses the HP 2010 objective 23-4 (Public Health Infrastructure: data for select populations).

Program Performance: The FY 2000 performance measure was to assure that by the end of FY 2000 the Urban Indian Health Program would have field tested in at least one site, a mutually compatible automated information system that captures health status and patient care data. This was accomplished when the Seattle Indian Health Board successfully completed the field test of a mutually compatible automated information system. In addition, at least six programs within the California area have transmitted data electronically during FY 2000. Another major accomplishment of FY 2000 was the installation of local area networks within at least 20 Urban Program sites, thus creating connectivity between the agency and the individual urban programs. The connectivity provided for 100% compliance of reporting of the Urban Common Reporting Requirements transmitted electronically by each individual program.

Quality of Care Group:

The following two indicators address the quality of health care provided in IHS settings from both the perspective of accreditation and consumer satisfaction.

Indicator 20: During FY 2002, maintain 100% accreditation of all IHS hospitals and outpatient clinics.

Rationale: The accreditation of IHS hospitals and clinics represents perhaps the most objective and respected measure of health care quality and thus the inclusion of this indicator is self-evident. In addition, accreditation is essential for maximizing third-party collections, and contributes directly and indirectly to many other indicators presented in this plan.

Approach: The local I/T/U multidisciplinary team approach to accreditation and ongoing quality management has been the mainstay of success in this important activity. Additional support and guidance from Areas and Headquarters staff will continue to support this indicator. This will be one of the most demanding indicators to meet given the growing clinical quality of care assessments that are required as well as issues related to health facilities maintenance, improvement, and renovation that are critical to accreditation. The accrediting body used for hospitals and some ambulatory health centers is the Joint Commission on the Accreditation of Health Care Organizations (JCAHO). However, there was an increase in the ambulatory health centers that obtained accreditation from the American Association of Ambulatory Health Centers (AAHC).

Data Source: IHS compiled database generated from accreditation reports submitted by IHS Area Quality Assurance coordinators.

Baseline: 100% accreditation of IHS hospitals and outpatient clinics for FY 1999 and FY 2000.

Type of Indicator: Process and Balance Scorecard: internal perspective

Linkages: This indicator supports the DHHS Strategic Plan, Goal 4, *Improve the Quality of Health Care and Human Services*, and Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives* and broadly supports several HP 2010 objectives in Focus Area 1: Access to Quality Health Services.

Program Performance: The FY 2000 indicator committed to maintaining 100% accreditation of all IHS hospitals and outpatient clinics. This indicator has been achieved. During FY 2000, eight IHS hospitals were evaluated by JCAHO and all eight maintained full accreditation with seven of the eight improving their score from their previous accreditation assessments and one hospital achieving the same score a their previous evaluation. In addition, 15 ambulatory health centers participated in accreditation visits from JCAHO and AAAHC and all were accredited, with five being accredited for the first time.

Indicator 21: During FY 2002, establish baseline health care consumer satisfaction levels for all IHS Areas using an approved instrument.

Rationale: The intent of this indicator is to improve consumer satisfaction. Assessing consumer satisfaction is fundamental to quality management, assuring improved customer satisfaction, and required for accreditation of hospitals and clinics.

Approach: In FY 1999 the IHS developed a comprehensive culturally sensitive consumer satisfaction survey instrument that was based on a tested and validated instrument from the private sector. In FY 2000 the instrument and data collection protocol were to have completed the Paperwork Reduction Act clearance process and to be used to identify baseline scores for IHS hospitals and clinics. However, the submission package was delayed in completion and will not reach OMB until mid FY 2001. With clearance not anticipated until late FY 2001, the baseline assessment will not be complete until FY 2002.

The responsible parties for implementation are the local I/T/U service sites with assistance from the IHS Area office staff. The local staff will be part of the local quality assurance program and the aggregate staff will be part of the IHS epidemiology centers/program.

Data Source: IHS Consumer Satisfaction Survey

Baseline: To be determined with initial FY 2002 survey

Type of Indicator: Process and Balance Scorecard: customer perspective

Linkages: These indicators support the DHHS Strategic Plan, Goal 4, *Improve the Quality of Health Care and Human Services*, and Strategic Objective 3.6 *Improve the Health Status of American Indians and Alaska Natives.*

Program Performance: The FY 2000 indicator was to submit a pre-tested culturally sensitive consumer satisfaction instrument for clearance through the Paperwork Reduction Act process by the end of FY 2000 and secure a baseline assessment. The Indian Health Services has made limited progress the effort to develop and implement a patient satisfaction survey. The step to obtain full approval of the instrument moved forward after receiving no public comments from the 30 and 60-day Federal Registry Notices publications. An additional delay occurred with the process when the Agency clearance officer put a revision of the questionnaire forth for consideration. Questions on this issue are currently in the process of being resolved. The remaining component of the survey instrument to be completed is a revision of the instruction for use by the area liaison when the survey instrument is implemented.